

CLAIMS

1-7. (Cancelled)

8. (Currently amended) A method of mediating an immune response, comprising the step of administering attenuated T-cells to a human, wherein the human T-cells are cultured in the presence of whole bovine myelin proteins or synthetic human myelin proteins and prepared by selecting and expanding human T-cells that respond to a plurality of different myelin proteins and wherein the administered attenuated T-cells target more than one myelin protein and wherein said human is in need of treatment for multiple sclerosis.

9. (Original) The method of claim 8, wherein the T-cells are derived from autologous peripheral mononuclear cells.

10. (Cancelled)

11. (Cancelled)

12. (Original) The method of claim 8, wherein the attenuated T-cells are attenuated by irradiation.

13. (Cancelled)

14. (Original) The method of claim 8, wherein the T-cells are administered subcutaneously.

15. (Original) The method of claim 8, wherein the T-cells are administered in 4 to 6 week intervals.

16. (Original) The method of claim 8, wherein the T-cells are administered for approximately 18 months.

17. (Original) The method of claim 8, wherein the T-cells are administered in a first dosage of 30×10^6 to 80×10^6 attenuated T-cells.

18. (Original) The method of claim 17, further comprising more than one administered dosage, wherein later dosages are increased if there is no clinical response to the first dosage, up to the point of adverse reactions.

19. (Original) The method of claim 17, further comprising more than one administered dosage, wherein later dosages are increased if there is no clinical response to the first dosage, up to the point of clinical response.

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Previously amended) The method of claim 8, wherein said attenuated T-cells are reactive to a plurality of different myelin proteins.

24. (Cancelled)

25. (Cancelled)

26. (Previously amended) The method of claim 23, wherein said plurality of different myelin proteins are bovine myelin proteins.

27. (Cancelled)

28. (Previously amended) The method of claim 23, wherein said plurality of different myelin proteins are synthetic human myelin proteins.

29. (Cancelled)

30. (Currently amended) The method of claim 8, wherein said attenuated T-cells are prepared by a second method comprising the steps of:

a) obtaining a polyclonal mixture of T cells peripheral blood mononuclear cells (PBMCs) from a human;

b) culturing said polyclonal mixture of T cells PBMCs in serum free media supplemented with gentamicin;

c) stimulating said polyclonal mixture of T cells PBMCs in the presence of whole bovine myelin proteins or synthetic complete human myelin proteins;

d) expanding said polyclonal mixture of T cells PBMCs using recombinant human IL-2;

e) repeating steps c and d until selecting a polyclonal subset of T cells wherein said polyclonal subset of T cells are reactive to at least two different myelin proteins as detected in a

proliferation assay and response to myelin antigens exceeds response to control antigens by threefold; and

f) combining said polyclonal subset of T-cells with a buffer, thereby producing the attenuated T-cells for mediating an immune response in a human, wherein upon administering the attenuated T-cells the number of aberrant autoimmune T cells is reduced in said human.